

November 11, 2019

Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section, Mail Code #19
1021 North Grand Avenue East
Springfield, Illinois 62794-9276

Illinois Environmental Protection Agency
DWPC Marion Region
2309 West Main Street
Marion, Illinois 62959

**Discharge Monitoring Report for October 2019
(Permit No. 2015-EP-59681-1)
Pump and Treat System
Crab Orchard National Wildlife Refuge, Marion, Illinois**

Dear Sir or Madam:

AECOM, on behalf of the United States Fish and Wildlife Service (USFWS), is submitting the attached October 2019 Discharge Monitoring Report (DMR) for the subject treatment system located on the Crab Orchard National Wildlife Refuge (CONWR) in Marion, Illinois. This DMR has been prepared as required by the Permit to Construct, Own, and Operate (Permit No. 2015-EP-59681-1), dated April 28, 2017, for discharge to the City of Marion, IL publicly owned treatment works (POTW). Discharge of the treated effluent of the Pump and Treat System to the Marion POTW commenced on May 4, 2011. For the month of October 2019, the system operated the full duration of the month. However, data from 10/01/19 to 10/02/19 were lost due to a technical issue with the system's router. Flow rates and daily totals for this period were extrapolated and estimated from data received once the system's telemetry capabilities were restored. The enclosed discharge summary was used to prepare the DMR.

Please contact Mr. Andy Day (314.429.0100) with any questions.

Sincerely,



Andy Day
Environmental Scientist
AECOM

encl: DMR
Discharge Summary

cc: *(via electronic mail)*
Viral Patel, USFWS
Paul Lake, IEPA
Mike Coffey, USFWS Project Coordinator
Chuck Beasley, USFWS
Brent Cain, City of Marion POTW

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Form Approved

OMB No. 2040-0004

NAME USFWS
Crab Orchard National Wildlife
Refuge
ADDRESS 8588 Route 148
Marion, IL 62599

DISCHARGE MONITORING REPORT (DMR)


2015-EP-59681-1	to POTW
PERMIT NUMBER	DISCHARGE NUMBER

FACILITY Crab Orchard National Wildlife
LOCATION Refuge Superfund Site

MONITORING PERIOD							
FROM				TO			
YEAR	MO	DAY		YEAR	MO	DAY	
2019	10	01		2019	10	31	

NOTE: Read instructions before

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
Flow, Total Daily Volume	SAMPLE	5,135	5,827	gpd					0	Daily	Cont
	PERMIT REQUIREMENT	7,200	14,400							Daily	Cont
Flow, Daily Average Rate	SAMPLE	3.56	3.87	gpm					0	Daily	Cont
	PERMIT REQUIREMENT	Report	Report							Daily	Cont
pH, Standard Units	SAMPLE				7.03		7.03	s.u.	0	1/mo	Grab
	PERMIT REQUIREMENT				5.5		9.5			1/mo	Grab
Polychlorinated Biphenyls, total	SAMPLE				<0.00043	<0.00043	<0.00043	mg/L	0	1/mo	Grab
	PERMIT REQUIREMENT						0.003			1/mo	Grab
	SAMPLE										
	PERMIT REQUIREMENT										
	SAMPLE										
	PERMIT REQUIREMENT										
	SAMPLE										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.		TELEPHONE		DATE		
			314	802.1141	2019	11	11
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA	NUMBER	YEAR	MO	DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

Operated under the supervision of Andrew Day and Brooks Pfeiffer, Class K Operators - Crab Orchard Pump and Treat System

Crab Orchard National Wildlife Refuge
Permanent Pump and Treat System
Discharge Summary - October 2019
AECOM Project Number: 60610517

October 2019	Flow (gpm)	Totalizer (gal)	Total Flow (gpd)	Effluent		Comments
				Total PCBs (mg/L)	pH (s.u.)	
10/1/2019	3.70	13,696,862	5,328			data loss due to modem update; values estimated based on average flow rates and totalizer readings once repaired
10/2/2019	3.70	13,702,190	5,328			
10/3/2019	2.45	13,708,017	3,446	< 0.00043	7.03	
10/4/2019	3.80	13,710,964	5,469			
10/5/2019	3.87	13,716,433	5,554			
10/6/2019	3.86	13,721,987	5,542			
10/7/2019	3.80	13,727,529	5,480			
10/8/2019	3.80	13,733,009	5,473			
10/9/2019	3.80	13,738,482	5,460			
10/10/2019	3.79	13,743,942	5,439			
10/11/2019	3.71	13,749,381	5,334			
10/12/2019	3.66	13,754,715	5,258			
10/13/2019	3.62	13,759,973	5,238			
10/14/2019	3.63	13,765,211	5,236			
10/15/2019	3.60	13,770,447	5,223			
10/16/2019	3.58	13,775,670	5,174			
10/17/2019	3.46	13,780,844	4,982			
10/18/2019	3.48	13,785,826	4,995			
10/19/2019	3.49	13,790,821	4,988			
10/20/2019	3.45	13,795,809	4,966			
10/21/2019	3.43	13,800,775	4,956			
10/22/2019	3.42	13,805,731	4,956			
10/23/2019	3.41	13,810,687	4,942			
10/24/2019	3.42	13,815,629	4,949			
10/25/2019	3.50	13,820,578	5,062			
10/26/2019	3.52	13,825,640	5,090			
10/27/2019	3.56	13,830,730	5,126			
10/28/2019	3.51	13,835,856	5,077			
10/29/2019	3.50	13,840,933	5,058			
10/30/2019	3.49	13,845,991	5,030			
10/31/2019	3.50	13,851,021	5,029			
Data Summary	Flow (gpm)	Totalizer (gal)	Total Flow (gpd)	Effluent		Comments
				Total PCBs (mg/L)	pH (s.u.)	
Minimum	2.45	13,696,862	3,446	< 0.00043	7.03	
Average	3.56	13,774,570	5,135	< 0.00043	7.03	
Maximum	3.87	13,851,021	5,554	< 0.00043	7.03	

Notes:

gpm - gallons per minute
gal - gallons
gpd - gallons per day
PCBs - polychlorinated biphenyls
mg/L - milligrams per liter
< - analyte not detected
s.u. - standard units